

FORM PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
210121.419C7APPLICATION NO.  
09/534,825**INFORMATION DISCLOSURE STATEMENT**  
(Use several sheets if necessary)APPLICANTS  
Tony N. Frudakis et al.FILING DATE  
March 23, 2000GROUP ART UNIT  
1641**COPY****U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,872,237	02/16/99	Feder et al.	536	23.5	
	AB	5,811,535	10/22/98	Adamou et al.	536	23.5	
	AC	5,585,270	12/17/96	Grotendorst et al.	435	252.3	
	AD	5,523,225	06/04/96	Kraus	435	240.1	
	AE	5,516,650	05/14/96	Foster et al.	435	68.1	
	AF	5,428,145	06/27/95	Okamoto et al.	536	23.72	
	AG	5,231,012	07/27/93	Mosmann et al.	435	69.52	

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AH	GB 2 273 099 A	06/08/94	Great Britain		
	AI	WO 98/45328	10/15/98	WIPO		
	AJ	WO 97/25431	07/17/97	WIPO		
	AK	WO 97/25426	07/17/97	WIPO		
	AL	WO 97/06256	02/20/97	WIPO		
	AM	WO 96/38463	12/05/96	WIPO		
	AN	WO 95/32311	11/30/95	WIPO		
	AO	WO 95/19369	07/20/95	WIPO		
	AP	WO 95/10777	04/20/95	WIPO		
	AQ	WO 91/02062	02/21/91	WIPO		

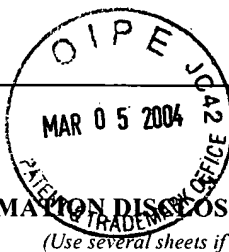
**OTHER PRIOR ART** (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Adams et al., Genbank Accession No. Q60347, 1993.
	AS	Adams et al., Genbank Accession No. Q61250, 1993.

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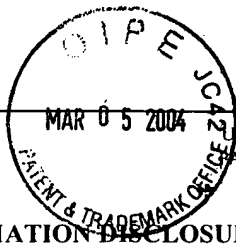
## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BC	Anderson et al., "Sequence and organization of the human mitochondrial genome," <i>Nature</i> 290:457-465, 1981.
BD	Bauer et al., "Identification of differentially expressed mRNA species by an improved display technique (DDRT-PCR)," <i>Nucleic Acids Research</i> 21(18):4272-4280, 1993.
BE	Bernard et al., "Cloning and Sequencing of Pro- $\alpha$ 1(XI) Collagen cDNA Demonstrates That Type XI Belongs to the Fibrillar Class of Collagens and Reveals That the Expression of the Gene Is Not Restricted to Cartilagenous Tissue," <i>J. Biol. Chem.</i> 263(32):17159-17166, 1988.
BF	Bratthauer et al., "Expression of LINE-1 Retrotransposons in Human Breast Cancer," <i>Cancer</i> 73:2333-2336, 1994.
BG	Byrne et al., "A Screening Method to Identify Genes Commonly Overexpressed in Carcinomas and the Identification of a Novel Complementary DNA Sequence," <i>Cancer Research</i> 55:2869-2903, 1995.
BH	Chai et al., Genbank Accession No. U03644, 1994.
BI	Charnock-Jones et al., "Extension of incomplete cDNAs (ESTs) by biotin/streptavidin-mediated walking using polymerase chain reaction," <i>J. Biotechno.</i> 35:205-215, June 1994.
BJ	Chen and Sager, "Differential Expression of Human Tissue Factor in Normal Mammary Epithelial Cells and in Carcinomas," <i>Molecular Medicine</i> 1(2):153-160, 1995.
BK	Chen and Sager, "Differential Expression of Human Tissue Factor in Normal Mammary Epithelial Cells and in Carcinomas," <i>Molecular Medicine</i> 1(2): 153-160, 1995.

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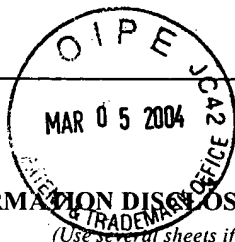
## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CC	Cordonnier et al., "Isolation of Novel Human Endogenous Retrovirus-Like Elements with Foamy Virus-Related <i>pol</i> Sequence," <i>Journal of Virology</i> 69(9):5890-5897, 1995.
CD	Databank Genebank Accession No. Z34289, 1995.
CE	Ezzell, "Cancer "Vaccines": An Idea Whose Time Has Come?," <i>The Journal of NIH Research</i> 7:46-49, 1995.
CF	Frank et al., Genbank Accession No. Q70049, 1994.
CG	Gura, "Systems for Identifying New Drugs Are Often Faulty," <i>Science</i> 278:1041-1042, 1997.
CH	Haltmeier et al., "Identification of S71-Related Human Endogenous Retroviral Sequences with Full-Length <i>pol</i> Genes," <i>Virology</i> 209:550-560, 1995.
CI	Hillier et al., Genbank Accession No. H80165, 1995.
CJ	Hillier et al., Genbank Accession No. R19532, 1995.
CK	Hillier et al., Genbank Accession No. R55637, 1995.

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			YES	NO
DB				

**OTHER PRIOR ART** (Including Author, Title, Date, Pertinent Pages, Etc.)

DC	Hillier et al., Genbank Accession No. R60426, 1995.
DD	Hillier et al., Genbank Accession No. T83348, 1995.
DE	Hillier et al., Genbank Accession No. R35308, 1995.
DF	Keydar et al., "Properties of retrovirus-like particles produced by a human breast carcinoma cell line: Immunological relationship with mouse mammary tumor virus proteins," <i>Proc. Natl. Acad. Sci. USA</i> 81:4188-92, 1984.
DG	Leib-Mösch and Seifarth, "Evolution and Biological Significance of Human Retroelements," <i>Virus Genes</i> 11(2/3):133-145, 1996.
DH	Leib-Mösch et al., "Endogenous Retroviral Elements in Human DNA," <i>Cancer Research</i> 50:5636s-5642s, 1994.
DI	Leib-Mösch et al., "Genomic Distribution and Transcription of Solitary HERV-K LTRs," <i>Genomics</i> 18:261-269, 1993.
DJ	Liang et al., "Differential Display of Eukaryotic Messenger RNA by Means of the Polymerase Chain Reaction," <i>Science</i> 257:967-971, 1992.
DK	Matsubara et al., Genbank Accession No. T24124, 1995.

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EA						

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			YES	NO
EB				

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EC	Wang et al., "Detection of Mammary Tumor Virus <i>ENV</i> Gene-like Sequences in Human Breast Cancer," <i>Cancer Research</i> 55:5173-5179, 1995.
ED	Watson and Fleming, "Isolation of Differentially Expressed Sequence Tags from Human Breast Cancer," <i>Cancer Research</i> 54(17):4598-4602, 1994.
EE	Werner et al., "S71 Is a Phylogenetically Distinct Human Endogenous Retroviral Element with Structural and Sequence Homology to Simian Sarcoma Virus (SSV)," <i>Virology</i> 174:225-238, 1990.
EF	Yoshioka et al., "Pro- $\alpha$ 1(XI) Collagen. Structure Of The Amino-Terminal Propeptide And Expression Of The Gene In Tumor Cell Lines," <i>J. Biol. Chem.</i> 265(11):6423-6426, 1990.
EG	Critical Synergy: The Biotechnology Industry and Intellectual Property Protection, Presentation of the Intellectual Property Committee of the Biotechnology Industry Organization at the October 17, 1994, Hearing of the U.S. Patent and Trademark Office, San Diego, CA, published by the Biotechnology Industry Organization, Washington, D.C., pp. 75, 100-107.
EH	
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	FA						
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## FOREIGN PATENT DOCUMENTS

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							YES	NO
	FE	WO 94/11514	05/26/94	WIPO				
	FF	2,044,940A1	12/11/92	Canada				
	FG	WO 92/15680	09/17/92	WIPO				
	FH	WO 92/10573	06/25/92	WIPO				
	FI	EP0475623A1	03/18/92	Europe				

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	FJ	Ahmed et al., "Characterization of a retrovirus isolated from normal mink cells co-cultivated with a dog mammary tumour," <i>J. Gen. Virol.</i> 42:179-184, 1979.
	FK	Bakker et al., "Generation of antimelanoma cytotoxic T lymphocytes for healthy donors after presentation of melanoma-associated antigen-derived epitopes by dendritic cells <i>in vivo</i> ," <i>Cancer Research</i> 55:5330-5334, November 15, 1995.
	FL	Cease et al., "T cell clones specific for an amphipathic $\alpha$ -helical region of sperm whale myoglobin show differing fine specificities for synthetic peptides," <i>Journal of Experimental Medicine</i> 164:1779-1784, November 1986.
	FM	Derks et al., "Synthesis of a viral protein with molecular weight of 30,000 (p30) by leukemic cells and antibodies cross-reacting with simian sarcoma virus p30 in serum of a chronic myeloid leukemia patient," <i>Cancer Research</i> 42:681-686, February 1982.
	FN	Hehlmann et al., "Detection and biochemical characterization of antigens in human leukemic sera that cross-react with primate C-type viral proteins (M 30,000) <sup>1</sup> ," <i>Cancer Research</i> 43:392-399, January 1983.

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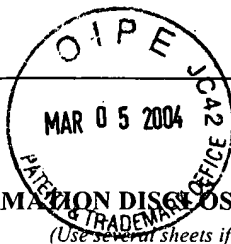
## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

GC	Herbrink et al., "Detection of antibodies cross-reactive with type C RNA tumor viral p30 protein in human sera and exudate fluids," <i>Cancer Research</i> 40:166-173, January 1980.
GD	Hopp, T., "Computer prediction of protein surface features and antigenic determinants," <i>Molecular Basis of Cancer Part B: Macromolecular Recognition, Chemotherapy, and Immunology</i> :367-377, 1985.
GE	Jerabek et al., "Detection and immunochemical characterization of a primate type C retrovirus-related p30 protein in normal human placentas," <i>Proc. Natl. Acad. Sci. USA</i> 81:6501-6505, October 1984.
GF	Kast et al., "Role of HLA-A motifs in identification of potential CTL epitopes in human papillomavirus type 16 E6 and E7 proteins," <i>J. Immunol.</i> 152:3904-3912, 1994.
GG	Kawakami et al., "Recognition of multiple epitopes in the human melanoma antigen gp100 by tumor-infiltrating T lymphocytes associated with in vivo tumor regression," <i>J. Immunol.</i> 154:3961-3968, 1995.
GH	Maeda et al., "Serum antibody reacting with placental syncytiotrophoblast in sera of patients with autoimmune diseases – a possible relation to type C RNA retroviruses," <i>Clin. Exp. Immunol.</i> 60:645-653, 1985.
GI	Margalit et al., "Prediction of immunodominant helper T cell antigenic sites from the primary sequence," <i>The Journal of Immunology</i> 138(7):2213-2229, April 1, 1987.
GJ	McCombs, R., "Role of oncornaviruses in carcinoma of the prostate," <i>Cancer Treatment Reports</i> 61(2):131-132, March/April 1977.
GK	Porter-Jordan and Lippman et al., "Overview of the biologic markers of breast cancer," <i>Breast Cancer</i> 8(1):73-100, February 1994.

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HB					

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

HC	Rammensee et al., "MHC ligands and peptide motifs: first listing," <i>Immunogenetics</i> 41:178-228, 1995.
HD	Rothbard and Taylor, "A sequence pattern common to T cell epitopes," <i>The EMBO Journal</i> 7(1):93-100, January 1988.
HE	Sette et al., "The relationship between class I binding affinity and immunogenicity of potential cytotoxic T cell epitopes," <i>J. Immunol.</i> 153:5586-5592, 1994.
HF	Smith et al., "Expression of antigenic crossreactivity to RD114 p30 protein in a human fibrosarcoma cell line," <i>Proc. Natl. Acad. Sci. USA</i> 74(2):744-748, February 1977.
HG	Spouge et al., "Strong conformational propensities enhance T cell antigenicity," <i>The Journal of Immunology</i> 138(1):204-212, January 1987.
HH	Tsai et al., "In vitro immunization and expansion of antigen-specific cytotoxic T-lymphocytes for adoptive immunotherapy using peptide pulsed dendritic cells," <i>Critical Reviews in Immunology</i> 18:65-75, 1998
HI	Vaczi and Toth, "Studies on antigens of C-type primate viruses and antibodies to them at patients wit myeloid leukemia and potentially preleukemic hematological disorders," <i>Arch. Geschwulstforsch</i> 50(8):769-777, 1980.
HJ	Visseren et al., "CTL specific for the tyrosinase autoantigen can be induced form healthy donor blood to lyse melanoma cells," <i>J. Immunol</i> 154:3991-3998, 1995.
HK	Vitiello et al., "Analysis of the HLA-restricted influenza specific cytotoxic T lymphocyte response in transgenic mice carrying a chimeric human-mouse class I major histocompatibility complex," <i>J. Exp. Med.</i> 173:1007-1015, April 1991.

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					YES	NO
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## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

IC		Wiley and Cunningham, "A steady state model for analyzing the cellular binding, internalization and degradation of polypeptide ligands," <i>Cell</i> 25:433-440, August 1981.
ID		GenBank Accession No. Z34289, "H. sapiens mRNA for nucleolar phosphoprotein p130," June 1, 1995.
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